

B encoding a polypeptide comprising SEQ ID NO:2, 4, 6, 8 or 10, or a ~~polypeptide domain~~ ^{subsequence} thereof having at least 64 consecutive residues thereof.

12. (New) A recombinant nucleic acid according to claim 10 comprising a coding strand encoding a polypeptide comprising SEQ ID NO:2, 4, 6, 8 or 10.

B 13. (New) A recombinant nucleic acid according to claim 10, comprising a coding strand encoding a polypeptide comprising SEQ ID NO:2, or a ~~polypeptide domain~~ ^{subsequence} thereof having at least 12 consecutive residues thereof.

B 14. (New) A recombinant nucleic acid according to claim 10, comprising a coding strand encoding a polypeptide comprising SEQ ID NO:2, or a ~~polypeptide domain~~ ^{subsequence} thereof having at least 64 consecutive residues thereof.

a *cont* 15. (New) A recombinant nucleic acid according to claim 10, comprising a coding strand encoding a polypeptide comprising SEQ ID NO:2.

b 16. (New) A recombinant nucleic acid according to claim 10, comprising a coding strand encoding a polypeptide comprising SEQ ID NO:4, or a ~~polypeptide domain~~ ^{subsequence} thereof having at least 12 consecutive residues thereof.

b 17. (New) A recombinant nucleic acid according to claim 10, comprising a coding strand encoding a polypeptide comprising SEQ ID NO:4, or a ~~polypeptide domain~~ ^{subsequence} thereof having at least 64 consecutive residues thereof.

18. (New) A recombinant nucleic acid according to claim 10, comprising a coding strand encoding a polypeptide comprising SEQ ID NO:4.

19. (New) A recombinant nucleic acid according to claim 10, comprising a coding strand

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encoding a polypeptide comprising SEQ ID NO:6, or a ~~polypeptide domain~~ ^{subsequence} thereof having at least 12 consecutive residues thereof.

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20. (New) A recombinant nucleic acid according to claim 10, comprising a coding strand ^{subsequence} encoding a polypeptide comprising SEQ ID NO:6, or a ~~polypeptide domain~~ ^{subsequence} thereof having at least 64 consecutive residues thereof.

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21. (New) A recombinant nucleic acid according to claim 10, comprising a coding strand encoding a polypeptide comprising SEQ ID NO:6.

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22. (New) A recombinant nucleic acid according to claim 10, comprising a coding strand ^{subsequence} encoding a polypeptide comprising SEQ ID NO:8, or a ~~polypeptide domain~~ ^{subsequence} thereof having at least 12 consecutive residues thereof.

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23. (New) A recombinant nucleic acid according to claim 10, comprising a coding strand ^{subsequence} encoding a polypeptide comprising SEQ ID NO:8, or a ~~polypeptide domain~~ ^{subsequence} thereof having at least 64 consecutive residues thereof.

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24. (New) A recombinant nucleic acid according to claim 10, comprising a coding strand encoding a polypeptide comprising SEQ ID NO:8.

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25. (New) A recombinant nucleic acid according to claim 10, comprising a coding strand ^{subsequence} encoding a polypeptide comprising SEQ ID NO:10, or a ~~polypeptide domain~~ ^{subsequence} thereof having at least 12 consecutive residues thereof.

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26. (New) A recombinant nucleic acid according to claim 10, comprising a coding strand ^{subsequence} encoding a polypeptide comprising SEQ ID NO:10, or a ~~polypeptide domain~~ ^{subsequence} thereof having at least 64 consecutive residues thereof.

27. (New) A recombinant nucleic acid according to claim 10, comprising a coding strand encoding a polypeptide comprising SEQ ID NO:10.

28. (New) A recombinant nucleic acid according to claim 10, comprising a coding strand encoding a polypeptide comprising at least one of residues 1-12; residues 18-28; residues 31-40; residues 45-65; residues 106-116; residues 137-145; residues 214-230; residues 274-286; residues 314-324; residues 399-412; residues 496-507; residues 548-565; residues 599-611; residues 660-671; residues 717-730; residues 780-791; residues 835-847; residues 877-891; residues 930-942; residues 981-998; residues 1040-1051; residues 1080-1090; residues 1154-1168; residues 1215-1231; residues 1278-1302; residues 1606-1626; and residues 1639-1651 of SEQ ID NO:8 or at least one of residues 5-16; residues 38-47; residues 83-94; residues 112-125; residues 168-180; residues 195-209; residues 222-235; and residues 241-254 of SEQ ID NO:10.

29. (New) A cell comprising a nucleic acid according to claim 10.

30. (New) A cell comprising a nucleic acid according to claim 12.

31. (New) A cell comprising a nucleic acid according to claim 22.

32. (New) A cell comprising a nucleic acid according to claim 24.

33. (New) A cell comprising a nucleic acid according to claim 25.

34. (New) A cell comprising a nucleic acid according to claim 27.

35. (New) A cell comprising a nucleic acid according to claim 28.

36. (New) A method of making a Robo polypeptide, comprising the steps of: incubating a host cell or cellular extract containing a nucleic acid according to claim 10 under conditions

whereby the polypeptide encoded by the nucleic acid is expressed and recovering the expressed polypeptide.

37. (New) A method according to claim 36, wherein the host cell or cellular extract contains a nucleic acid according to claim 12.

38. (New) A method according to claim 36, wherein the host cell or cellular extract contains a nucleic acid according to claim 22.

39. (New) A method according to claim 36, wherein the host cell or cellular extract contains a nucleic acid according to claim 24.

40. (New) A method according to claim 36, wherein the host cell or cellular extract contains a nucleic acid according to claim 25.

41. (New) A method according to claim 36, wherein the host cell or cellular extract contains a nucleic acid according to claim 27.

42. (New) A method according to claim 36, wherein the host cell or cellular extract contains a nucleic acid according to claim 28.

43. (New) A method for modulating function or morphology of a target cell, the method comprising the steps of:

incubating a host cell or cellular extract containing a nucleic acid according to claim 10 under conditions whereby the polypeptide encoded by the nucleic acid is expressed; and

providing the target cell with the polypeptide, whereby the polypeptide modulates a function or morphology of the cell.

44. (New) A method according to claim 43, wherein the host cell or cellular extract contains

a nucleic acid according to claim 12

45. (New) A method according to claim 43, wherein the host cell or cellular extract contains a nucleic acid according to claim 22.

46. (New) A method according to claim 43, wherein the host cell or cellular extract contains a nucleic acid according to claim 24.

47. (New) A method according to claim 43, wherein the host cell or cellular extract contains a nucleic acid according to claim 25.

48. (New) A method according to claim 43, wherein the host cell or cellular extract contains a nucleic acid according to claim 27.

49. (New) A method according to claim 43, wherein the host cell or cellular extract contains a nucleic acid according to claim 28.

50. (New) A recombinant nucleic acid comprising a strand of SEQ ID NO:1, 3, 5, 7 or 9, or of a subsequence thereof having at least 24 consecutive nucleotides thereof, wherein said subsequence is contained in neither SEQ ID NO:7, nucleotides 502-651, nor SEQ ID NO:7, nucleotides 3946-4560, nor SEQ ID NO:11, wherein said strand is flanked by fewer than 500 bp of native flanking sequence.

51. (New) A recombinant nucleic acid according to claim 50, comprising a strand of SEQ ID NO:1, 3, 5, 7, 9 or 11, or of a fragment thereof having at least 96 consecutive ^{nucleotides} ~~bases~~ thereof.

52. (New) A recombinant nucleic acid according to claim 50, comprising a strand of SEQ ID NO:1, 3, 5, 7 or 9.

53. (New) A recombinant nucleic acid according to claim 50, comprising a strand of SEQ ID NO:1, or of a fragment thereof having at least 24 consecutive ^{nucleotides} bases thereof.

54. (New) A recombinant nucleic acid according to claim 50, comprising a strand of SEQ ID NO:1, or of a fragment thereof having at least 96 consecutive ^{nucleotides} bases thereof.

55. (New) A recombinant nucleic acid according to claim 50, comprising a strand of SEQ ID NO:1.

56. (New) A recombinant nucleic acid according to claim 50, comprising a strand of SEQ ID NO:3, or of a fragment thereof having at least 24 consecutive ^{nucleotides} bases thereof.

57. (New) A recombinant nucleic acid according to claim 50, comprising a strand of SEQ ID NO:3, or of a fragment thereof having at least 96 consecutive ^{nucleotides} bases thereof.

58. (New) A recombinant nucleic acid according to claim 50, comprising a strand of SEQ ID NO:3.

59. (New) A recombinant nucleic acid according to claim 50, comprising a strand of SEQ ID NO:5, or of a fragment thereof having at least 24 consecutive ^{nucleotides} bases thereof.

60. (New) A recombinant nucleic acid according to claim 50, comprising a strand of SEQ ID NO:5, or of a fragment thereof having at least 96 consecutive ^{nucleotides} bases thereof.

61. (New) A recombinant nucleic acid according to claim 50, comprising a strand of SEQ ID NO:5.

62. (New) A recombinant nucleic acid according to claim 50, comprising a strand of SEQ ID NO:7, or of a fragment thereof having at least 24 consecutive ^{nucleotides} bases thereof.